## Interaction with CMOS and Terminal Characteristics

Michael A. Bridgwood - Clemson University



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**Report Documentation Page** 

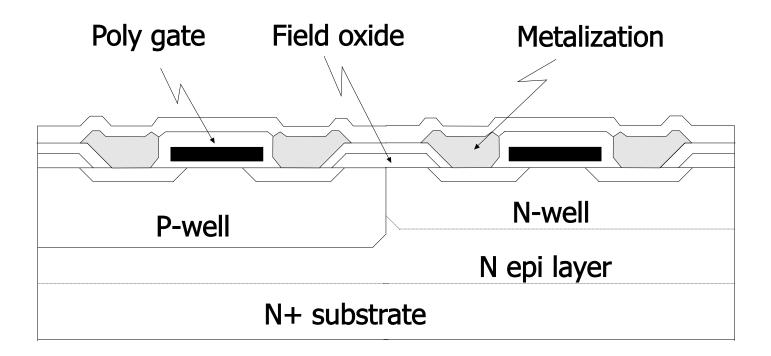
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#### **Conducted Interactions - CMOS Devices**

- Mechanisms and Vulnerability Thresholds
- Impedance of Inputs through Switching
- Waveforms Pulses and Damped Rings

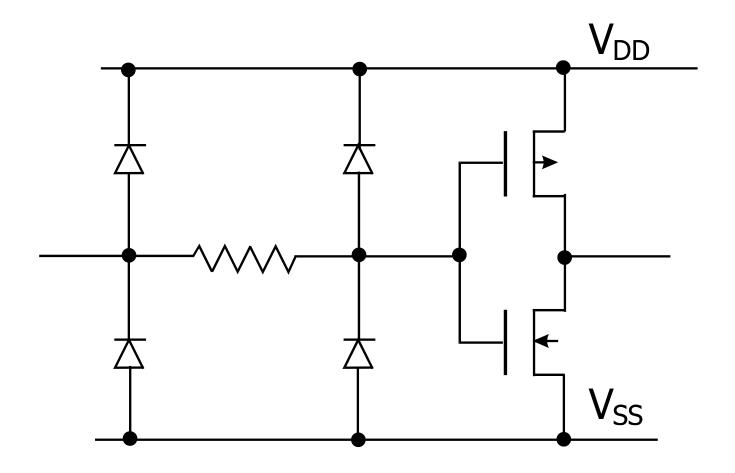


#### **Interaction with CMOS – Mechanisms**



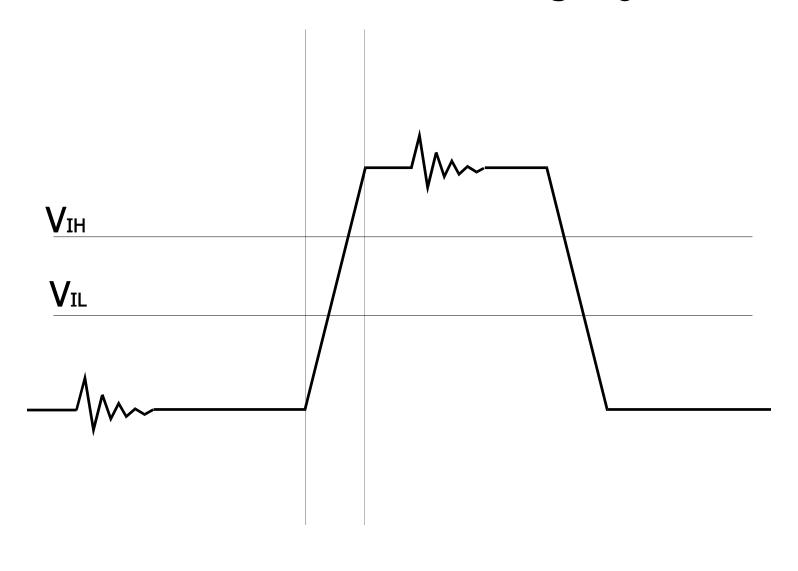


## **Interaction with CMOS – Input Circuit**



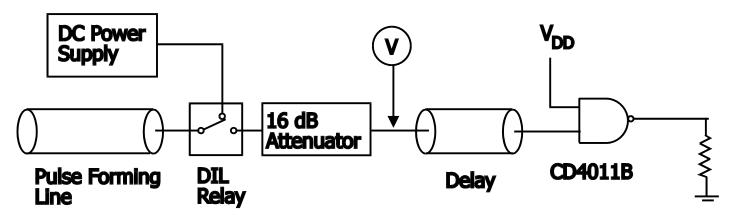


## Interaction with CMOS – Ring Injection

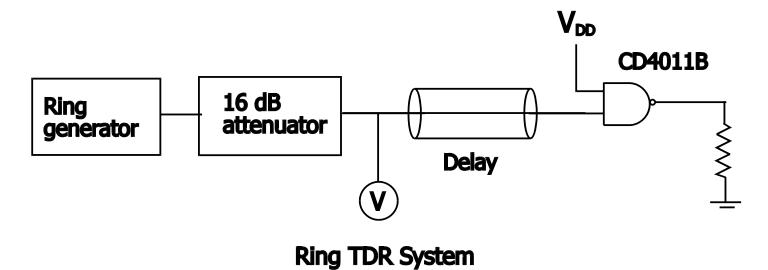




## **CMOS Interactions – Injection Systems**

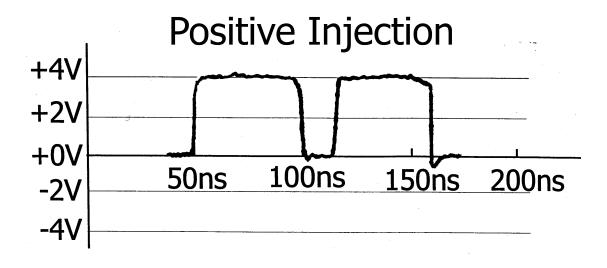


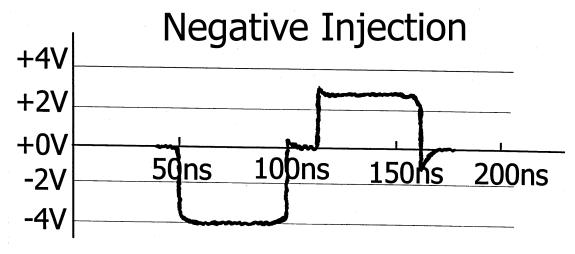
#### **Pulse TDR System**





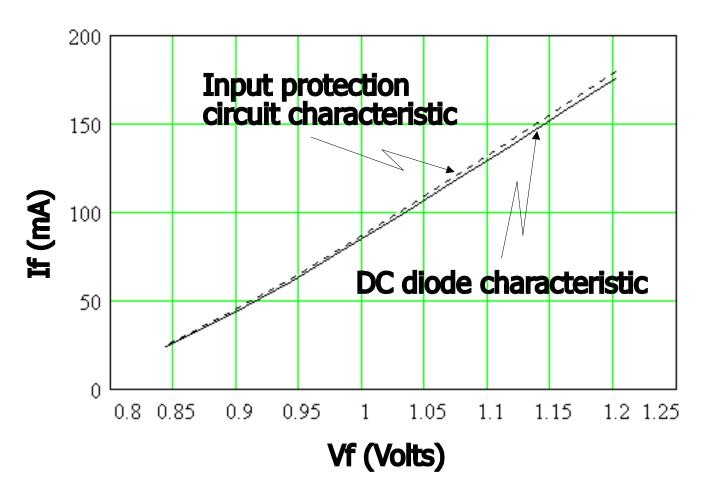
### **CMOS Interaction – Pulse TDR Injection**





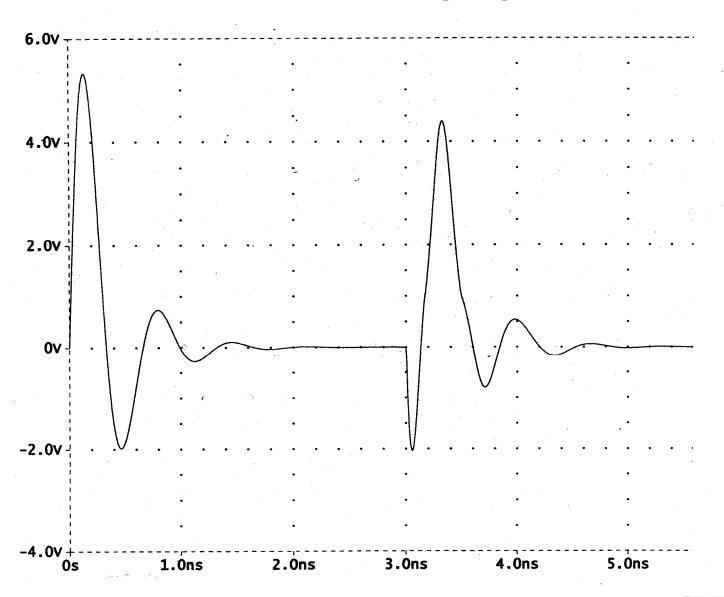


# CMOS Input – Pulse TDR Negative Injection





## **CMOS Interaction – Ringing TDR**





#### **Conducted Interactions – Future Work**

- Mechanisms and Vulnerability Thresholds
- Waveforms Pulses and Damped Rings
- Extend work to other digital devices

